Arboricultural Report

Proposed development at

Newtown Meadow
Fingal Street
Worlingworth
Suffolk

22nd March 2023



Client & Site

Mr & Mrs Uff Newtown Meadow Newtown Fingal Street Worlingham Woodbridge Suffolk IP13 7HR

Newtown Meadow, Newtown

Planning authority

Babergh and Mid Suffolk District Councils Endeavour House 8 Russell Road Ipswich IP1 2BX

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Summary

- This report provides the results of a tree survey of land at Newtown Meadow, Newtown, Fingal Street, Worlingworth, Woodbridge, Suffolk, IP13 7HR and an arboricultural constraints assessment of the site, which may be used to inform the planning process.
- The local planning authority is Babergh and Mid Suffolk Council and interrogation of the Council's
 interactive web-based planning constraints maps confirms that there are no Tree Preservation
 Orders protecting the trees on or around the site and that there is no Conservation Area in
 Newtown or Worlingworth.
- The site contains high quality (BS 5817:2012 Category A) trees.
- No trees are to be removed to make space for the proposed development.
- Recommended root protection areas are mapped in this report. No construction activities should take
 place within root protection areas, except as indicated in the detailed method statement.
- We consider that development can be accommodated with minimal impacts on the retained arboricultural interest of the site.

1. INTRODUCTION

- 1.1. Greenlight Environmental Consultancy Ltd has been commissioned to prepare an arboricultural report for land at Newtown Meadow, Newtown, Fingal Street, Worlingworth, Woodbridge, Suffolk, IP13 7HR.
- 1.2. The site was accessed from approximate grid reference TM 21542 68918.
- 1.3. The report includes a survey of those trees that may be affected and an assessment of the potential arboricultural impact of the proposed development on the trees.

2. METHODOLOGY

- 2.1. The tree survey and arboricultural aspects have been prepared in accordance with recommendations provided in BS 5837:2012, Trees in relation to design, demolition and construction recommendations.
- 2.2. The site survey included trees, within the boundaries of the site and those considered to be potentially affected by development proposals, with a stem diameter over 75mm at 1.5m height.
- 2.3. The tree inspection took place from ground level using visual tree assessment methods, with the use of binoculars and Suunto clinometer. The presence and condition of bark and stem wounds, cavities, decay, fungal fruiting bodies and any structural defects that could increase the risk of structural failure were noted.
- 2.4. Details for each tree were recorded with management recommendations if deemed necessary for the development requirements, a category grading according to BS 5837:2012, and tree protection distance.

Constraints

- 2.5. No internal decay devices or other invasive tools to assess tree condition were used.
- 2.6. No soil excavation or root inspection was carried out.
- 2.7. The survey has not considered the effect that trees or vegetation may have on the structural integrity of future building through subsidence or heave.

3. DESKTOP REVIEW

- 3.1 The proposed development site is located in the small Hamlet of Newtown. It is located around 10 miles southeast of Diss and 19 miles north of Ipswich. Newtown is part of Worlingham Parish along with Fingal Street. "The village topography is typical of a Suffolk parish, a long "street" with isolated groups of dwellings and the occasional narrow side roads leading off to a neighbouring parish. The church and the inn form the centres of the two main settlement clusters and visual evidence of the ancient village green the former common land exists today with the preservation of Great Green on Shop Street. Worlingworth straggles along an unclassified road which roughly heads southeast to northwest from the direction of Framlingham to Eye." (reproduced from Worlingworth local history group website).
- 3.2 The development proposal is for the conversion of redundant agricultural buildings into a residential dwelling with associated infrastructure for vehicular access and utility services.
- 3.3 The local planning authority is Babergh and Mid Suffolk Council and interrogation of the Council's interactive web-based planning constraints maps confirms that there are no Tree Preservation Orders protecting the trees on or around the site and that there is no Conservation Area in Newton or Worlingworth.



Figure 1. Site location

4. FIELD STUDY

- 4.1. The site is currently an agricultural/horticultural holding, with brick and concrete block livestock buildings within a rectangular plot. There is a small farm pond in the south eastern corner and the surrounding area has evidence of being used for more recreational purposes.
- 4.2. The larger stature trees on the site are mainly around the perimeter and many stand on adjacent land. There are also some young/semi-mature trees of a variety of species within site in association with the pond and the more recreational corner of the site.
- 4.3. There are mixed native hedgerows along the field boundaries. The site is rural in character and abuts further arable farmland to the north and south. Beyond the eastern boundary is a collection of dwellings and the land to the west of the site is the rest of the arable field.
- A.4. The soils in this area are generally slowly permeable, seasonally wet, slightly acid but base-rich loamy and clayey soils and thus of moderate natural fertility but vulnerable to compaction. The site stands in The South Norfolk and High Suffolk Claylands National Character Area (NCA 83); "The South Norfolk and High Suffolk Claylands National Character Area (NCA) occupies a large area of central East Anglia stretching from just below Norwich in the north down to the River Gipping in the south. The area is bounded to the north by Mid Norfolk and The Broads NCAs and to the east by the sandy heathland of the Suffolk Coast and Heaths NCA. To the west the landscape merges into the drier and more open character of The Brecks NCA and to the south it meets the South Suffolk and North Essex Clayland NCA with its noticeably more undulating topography. 'High' Suffolk originally derives its name from the contrast between this formerly well-treed area and the openness of the adjacent areas to the east and west. Today it is probably better understood as meaning the high and predominantly flat clay plateau that dominates the character of the NCA. The plateau is incised by numerous small-scale wooded river valleys with complex slopes that in places are much unexpected for East Anglia. The underlying geology is chalk, which forms the principal aquifer, and shallow marine deposits overlain with glacial till, buried river gravels, lake sediments and bands of glacial outwash deposits."
- 4.5. This is a small village and whilst visible from the public road, it is suggested that any re-development would have minimal visual impacts due to the distance from the public road and the existing backdrop of development.



Figure 2: Tree Survey



Figure 3: Tree Constraints Plan

5 ASSESSMENT OF ARBORICULTURAL IMPLICATIONS

- 5.1 The trees likely to be affected on the site are plotted on a plan shown in Figure 2 above with their quality assessment colour coded according to the grading categories stipulated in the British Standard (BS). A schedule of the detailed survey data is reproduced in a table at Appendix A
- 5.2 The mature oak trees are of good quality and are graded category A for their ecological, cultural and landscape values. Of the other mature trees there are many ash, with a high degree of dieback and mature willow which are over-mature. These have been downgraded to Category B. The remaining trees and hedges are mostly young and small, do not yet provide much of a landscape impact and can be readily replaced. Category C trees would not normally be considered to constrain development. The cascade chart for tree quality assessment from BS5837:2012 is reproduced in appendix D.
- 5.3 No trees are as yet proposed for removal to make space for the development. There is scope to replace the Nissen hut storage buildings with a dwelling house without removing any trees or impacting on any tree rooting zones. The block and brick building behind them is almost entirely with the root protection areas.
- 5.4 Depending on where any dwelling is positioned in the site will depend on whether it will avoid any conflict from shading or nuisance from falling tree debris. The block and brick building behind them is heavily overhung by mature tree canopy.
- 5.5 The site is visible from the public road and will have a minor landscape impact, which can be mitigated by comprehensive landscaping proposals.
- 5.6 Table 1 Quality assessment of trees recorded in survey in accordance with BS5837:2012

	Trees	Groups	Hedges	TOTALS	To be removed	
Category U	0	0	0	0	0	
Category A	6	0	0	6	0	
Category B	9	0	0	9	0	
Category C	9	0	1	10	0	
TOTALS	24	0	1	25	0	

Tree Work

- 5.7 No tree work can be identified until a proposal has been drawn up.
- 5.8 Any tree work should be undertaken to the standards set out in BS 3998:2010 British Standard Recommendations for Tree Work.

Tree and Root Protection – Constraints on Development

- 5.9 The Tree Constraints Plan in Figure 3 shows the distance that construction should normally be kept away from retained trees to provide the Root Protection Area (RPA) recommended in BS 5837: 2012. Full protection of the RPAs should normally be reinforced by creating Construction Exclusion Zones through the erection of protective fencing constructed to at least a minimum standard as prescribed in BS 5837: 2012. This fencing should carry warning notices to prevent inadvertent encroachment. Since it is proposed to build within the RPA, it is impractical to fully exclude construction activity from the RPA. Those areas of the RPA outside the CEZ should be protected from ground compaction. The excavation of the foundations within the RPA should be dug by hand and any roots encountered should be cut cleanly with sharp tools to encourage swift healing and minimise opportunity for infection.
- 5.10 The tree protection plan in Appendix E provides an illustration of the location of the protective fencing and further general guidance on tree protection is provided in the arboricultural method statement in Appendix D.

6 CONCLUSIONS

- 6.1 Recommended root protection areas are mapped in this report. No construction activities should take place within root protection areas, except as indicated in the method statement.
- 6.2 Based on the proposed tree constraints plan and recommended tree protection measures, we consider that development can be accommodated on this site with minimal impacts on the arboricultural interest of the site.

7 BIBLIOGRAPHY

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Appendix A Tree Survey Detail

Tree ID	Common Name	Maturity	Height (m)	Height and direction of first significant branch (m)	Diam (mm) *	RPA radius (m)	RPA Area (m2)	Spread - N (m) ®	Spread - E (m)	Spread - S (m)	Spread - W (m)	Category	Sub category⁴	Life Expectancy	Phys Condition	Tree work recommendat ions
T 1	Scots Pine	Semi-mature	14	5 m S	280	3.4	3 5	0.5	2	5	3	В	1;2	>40 yrs	Fair	No Action
T 2	Common Ash	Mature	16	3 m N	260	3.1	31	4	3	6	6	В	1;2	>40 yrs	Fair	No Action
Т3	Common Ash	Mature	16	6 m S	280	3.4	3 5	5	2	4	2	В	1;2	>40 yrs	Fair	No Action
T 4	Common Oak	Young	5	0.6 m E	90	1.1	4	2.5				С	1;2	>40 yrs	Good	No Action
T 5	Common Ash	Mature	21	3 m W	740	8.9	248	5	5	6	7	Α	1;2	>40 yrs	Good	No Action
Т6	Common Oak	Young	6	0.6 m W	90	1.1	4	3				В	1;2	>40 yrs	Good	No Action
Т7	Common Oak	Young	5	1.2 m W	80	1.0	3	2.5				В	1;2	10 to 20 yrs	Good	No Action
Т8	Common Ash	Mature	17	2 m N	1010	12.1	461	8	7	9	8	А	1;2	>40 yrs	Fair	No Action
Т 9	Crack Willow	Over Mature	20	3 m S	1200	14.4	651	4	7	7	4	С	1;2	10 to 20 yrs	Poor	No Action
T10	Crack Willow	Mature	20	2 m N	750	9.0	254	7	7	2	2	С	1;2	10 to 20 yrs	Poor	No Action
T11	C o m m o n H o r n b e a m	Mature	14	3 m S	455	5.5	93	5	5	6	3	В	1;2	>40 yrs	Good	No Action
T12	Common Hornbeam	Semi-mature	7	1.8 m E	240	2.9	2 6	4	4	4	3	С	1;2	20 to 40 yrs	Poor	No Action
T13	Common Oak	Mature	20	4.5 m S	900	10.8	366	6	8	7	6	А	1;2	>40 yrs	Good	No Action
T14	Common Ash	Mature	20	4 m E	541	6.5	133	5				В	1;2	20 to 40 yrs	Good	No Action
T15	Common Ash	Mature	18	5 m S	480	5.8	104	2	4	8	7	С	1;2	20 to 40 yrs	Fair	No Action

Tree ID	Common Name	Maturity	Height (m)	Height and direction of first significant branch (m)	Diam (mm) *	RPA radius (m)	RPA Area (m2)	Spread - N (m) ®	Spread - E (m)	Spread - S (m)	Spread - W (m)	Category	Sub category⁴	Life Expectancy	Phys Condition	Tree work recommendat ions
T16	Common Ash	Mature	18	6 m W	380	4.6	65	4	3	3	5	С	1;2	20 to 40 yrs	Fair	No Action
T17	Common Ash	Mature	18	6 m N	440	5.3	88	7	6	3	6	В	1;2	20 to 40 yrs	Fair	No Action
T18	Common Ash	Mature	19	6 m S	590	7.1	158	7	6	8	7	С	1;2	10 to 20 yrs	Fair	No Action
T19	Plu m	Young	6	1.7 m E	130	1.6	8	2				С	1;2	20 to 40 yrs	Fair	No Action
T 2 0	Lawson Cypress	Semi-mature	11	2 m	3 4 0	4.1	5 2	3				С	1;2	>40 yrs	Good	No Action
T 2 1	Common Beech	Mature	16	1.6 m E	410	4.9	76	5				А	1;2	>40 yrs	Good	No Action
T 2 2	Lawson Cypress	Mature	14	3 m	430	5.2	8 4	3				В	1;2	>40 yrs	Fair	No Action
T 2 3	Common Oak	Mature	20	3 m N	550	6.6	137	6	6	4	5	А	1;2	>40 yrs	Fair	No Action
T 2 4	Common Ash	Mature	20	3 m S	600	7.2	163	6	4	3	7	Α	1;2	>40 yrs	Fair	No Action
H 2 5	Mixed native species Mature	Mature	4	n/a	n/a	n/a	n/a	1.5				С	1;2	20 to 40 yrs	Fair	No Action

Key Age class: Young (1st qtr of life expectancy) Semi-mature (2nd qtr of life expectancy) Early-mature (3rd qtr of life expectancy) Mature (final qtr of life expectancy)

Over mature (beyond life expectancy and declining naturally)

Veteran (of great age for its species and possibly of conservation value)

- * derived measurement using protocols in BS5837
- † Sub category "1" Arboricultural values, Sub category "2" Landscape values, Sub category "3" Cultural values
- Where only a northerly radial crown spread is given, the crown is assumed to be roughly circular

Appendix B - Photographic record of selected trees





Appendix C - BS 5837:2012 Table 1 Cascade chart for tree quality assessment

Table 1 Cascade chart f	or tree quality assessment									
Category and definition	Criteria (including subcategories where a	ppropriate)								
Trees unsuitable for retention	(see Note)									
Category U Those in such a condition	 Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g., where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) 									
that they cannot realistically be retained as living trees in	 Trees that are dead or are showing s 									
the context of the current land use for longer than 10 years	 Trees infected with pathogens of sig quality trees suppressing adjacent trees. 	nificance to the health and/or safety of other ees of better quality	trees nearby, or very low							
To years	NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve: see 4.5.7.									
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation							
Trees to be considered for reta										
Category A	Trees that are particularly good	Trees, groups or woodlands of particular	Trees, groups or woodlands							
Trees of high quality with an estimated remaining life expectancy of at least 40 years	examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	visual importance as arboricultural and/or landscape features	of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)							
Category B	Trees that might be included in	Trees present in numbers, usually growing	Trees with material							
Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality								
Category C	Unremarkable trees of very limited	Trees present in groups or woodlands, but	Trees with no material							
Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	merit or such impaired condition that they do not qualify in higher categories	without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	conservation or other cultural value							

Appendix D

ARBORICULTURAL METHOD STATEMENT

Land Newtown Meadow, Newtown

Scope of the Works

- The document provides a methodology for the protection of trees during the proposed development at the above site and should be read in conjunction with the Tree Protection Plan (TPP) in Appendix E and Timetable for Protection Works below.
- 2. The main features in the protection of the retained trees on site are as follows:
 - Provision of temporary protective barriers
 - Protective measures must be in place prior to any ground or construction works take place.

Timing of Works

- 3. Tree protection works will be completed according to the timetable below.
- 4. The exact commencement date is yet to be decided, however, the timetable provides the order in which the works need to be implemented to ensure the trees are suitably protected and states when specific arboricultural input will be required.

Item	Operation	Before starting Works	During Construction Works	On Completion
1.	Carry out a pre-commencement site meeting to discuss any tree protection matters arising	Х		
2.	Erect temporary protective fencing (thick pink line) on edge of the CEZ as specified in the AMS and TPP	Х		
3.	Erect warning signs on fencing around each CEZ stating "Construction Exclusion Zone - Keep Out".	Х		
4.	Installation of No-Dig hard surfaces	Х		
5.	Maintain Protective fences and signs in good condition.		Х	
6.	Remove protective fencing			Х
7.	Check condition of the protected trees and consider if remedial works are necessary.			Х

Tree Protection Barriers

- 5. Retained trees will be protected by forming Construction Exclusion Zones (CEZ) as shown on the Tree Protection Plan.
- 6. Temporary barriers will be erected as shown by the thick pink lines on the TPP to form the Construction Exclusion Zone (CEZ). The barriers will consist of 2m tall welded mesh panels (Heras) supported on rubber or concrete feet. The fence panels should be joined together using a minimum of two anti-tamper couplers installed so they can be removed from the inside of the fence. The distance between couplers should be at least 1m and be uniform throughout the fence. Panels should be supported on the inner side by stabilizer struts which should normally be attached to a base plate and secured with ground pins. Where the fence will be erected on hard surfacing or it is otherwise unfeasible to use ground pins the struts should be mounted on a block tray.

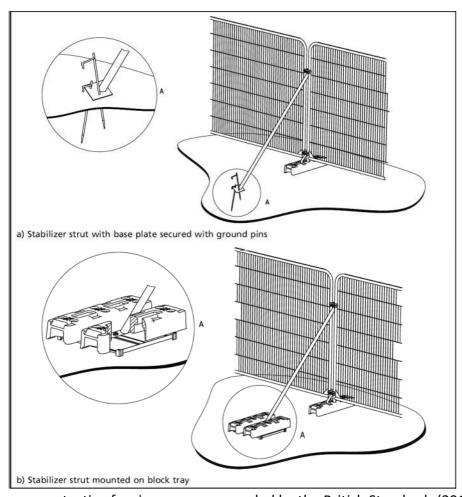


Fig 1: Temporary protective fencing as recommended by the British Standards (2012)

- 7. Notices should be erected on the barriers forming each CEZ stating "Construction Exclusion Zone No Access ". These should face outwards towards the work area. Signs must be maintained in good condition and remain in place until completion of the works.
- 8. Barriers will be maintained throughout the duration of the works, ensuring that access is denied to the CEZ throughout the process.

Storage Shipping Containers, Site Huts and Temporary Buildings

9. All storage containers, site huts and temporary buildings will be sited outside the CEZ.

Additional Precautions

- 10. The movement of plant in proximity to retained trees should be conducted under the supervision of a banksman to ensure adequate clearance from the branches of the trees.
 Hydraulic cranes, forklifts, excavators or piling rigs (other than small rigs used for mini piling) must be avoided in the immediate vicinity the crown of the trees.
- 11. Cement, oil, bitumen or any other products which spillage would be likely to be detrimental to tree growth should be stored well away from the outer edge of the RPA of retained trees. Precautions should include ensuring all toxic liquids are stored in fully bunded containers. Spill kits including absorbent materials must be available on site to deal with any accidental spillages that may occur.
- 12. Lighting of fires on site should be avoided. Where they are unavoidable they must be at such a distance from retained trees that there is no risk of the heat causing fire damage to the trunk or branches. Full account must be taken of wind direction. Fires must be attended at all times until they are completely extinguished.

Service Trenches

13. No details of new service runs have been provided at this stage. They should be routed to avoid the RPAs of trees. If this is not possible, special techniques must be employed to place the services within the RPA of the trees. The British Standard suggests a range of trenchless methods suitable for various applications including micro-tunnelling, surface launched directional drilling, pipe ramming and impact moleing/thrust boring. It is important common ducts should be used where it is not possible to avoid the RPA. Further guidance on installing underground services adjacent to trees can be found in the NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees (Volume 4 Issue 2). This document outlines a number of techniques that may be used for trenching near trees,

- including trenchless techniques, discontinuous trenching and hand digging.
- 14. It will be necessary to prepare detailed plans for these services that should be produced in conjunction with an arboriculturist, and include allowance for the space needed for access for the installations, and the levels across the proposed area.
- 15. Any overground services including CCTV must also be positioned to avoid the need for any regular or detrimental pruning to the trees.

Appendix E-Tree Protection Plan

